UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
25 FUNSTON ROAD
KANSAS CITY, KANSAS 66115

JAN 14 1991

MEMORANDUM

SUBJECT: Savannah Laboratories QAPjP for the RFI at Monsanto-Queeny Plant, St. Louis, Missouri

FROM: Jeffrey A. Wandtke, Chief RBDonna for
Quality Assurance & Data Evaluation Section, EDSB/ENSV

TO: Patricia Nichols
Permits Section, RCRA/WSTM

The subject document, prepared by Savannah Laboratories & Environmental Services, Inc., for Geraghty and Miller, Inc., and dated December 10, 1990, has been reviewed as requested. Attached please find comments resulting from the review conducted by ENSV contractor, Robert E. Nichols, ESAT. The Quality Assurance Management Office concurs with these comments.

If you have any questions, please contact me at 236-3881.

Attachment

QAMO Activity Number: QQC11
QAMO Document Number: 91077

ENVIRONMENTAL SERVICES ASSISTANCE TEAM -- ZONE II

ICF Technology Inc.

ManTech Environmental Technology Inc.

The Bionetics Corp.

ESAT Region VII
ManTech Env. Tech. Inc.
25 Funston Road
Kansas City, KS 66115
(913) 236-3881

TO: Jeff Wandtke,
Regional QAM, Region VII EPA

THRU: Dr. Harold Brown
ESAT Deputy Project Officer, EPA

FROM: Robert E. Nichols
ESAT QA/QC Chemist

THRU: Ronald A. Ross
ESAT Team Manager

DATE: January 4, 1991

SUBJECT: Review of a Quality Assurance document submitted by Savannah Laboratories & Environmental Services, Inc. in support of the **Monsanto J.F. Queeny Plant RCRA Facility Investigation.**

TID # 07-9009-519 METI # 4634-0519
EPA Activity # QQC11 ICF # 302-26-519-04
QA Doc. # 91077

ESAT Doc Control # ESAT - VII - 519 - 0052

A Laboratory Quality Assurance Project Plan (QAPjP), dated November 1990, was received by ESAT for review. This document was reviewed for adequacy and completeness in accordance with Regional SOP # 1330.2A. This document adequately addresses the required topics with only minor exceptions. **Approval is recommended with comments.**

received
DATE 1/4/91 EB

COMMENTS:

1. Section 16.0 discusses Quality Assurance (QA) reports to management but does not adequately describe the content of such reports, or when (how often) they will be generated.

2. This document specifies Practical Quantitation Limits (PQL), which correspond to Detection Limits (DL). These limits appear to be reasonable, but the specific DLs required by the project are unknown.

3. Section 11.0 specifies that the "client" will select one sample for each batch of 20 samples, and submit 3 replicates of all containers of that sample. These replicates will be used by the laboratory for the production of Matrix Spike / Matrix Spike Duplicate (MS/MSD) data. This is an acceptable and reasonable procedure, but the site specific Sampling Plan should reflect this requirement and the field personnel should be informed.

4. Section 7.3 notes that samples may be sent to the "Tallahassee Division Laboratory" (another division of the same company) in the event of an emergency, instrument failure, or exceedence of laboratory capacity. This may be acceptable but the Regional Project Manager should approve such a change before it is instituted.

5. There is no reason to believe that this laboratory is not acceptable. However, it is not currently in the CLP program. A summary of its performance in the WP and WS studies was obtained and appears to be acceptable. But information obtained from a recent on-site evaluation should be obtained before samples are analyzed by this laboratory. This information may be obtained from the State of Georgia or USEPA Region IV (the laboratory's home state and region). If such information is not available from these sources Region VII should consider performing such an evaluation. Additional PE audit samples do not seem to be necessary.

Attachment 2

QA Document Review Checklist

Project/Plan Name: Monsanto Lab QAPjP from Savannah Labs

Activity Number: QQC11 RQAO Document Number: 91077

Deficiencies were found in the elements checked below:
(See the attached review report for comments)

1. Project Objective — For lab only, No Field Activities

____ Objective or scope of the data collection activity
____ Intended use of the data
____ Action level, required detection limits, data quality objectives
____ Project participant / responsibility table; line authority diagram

2. Sampling procedures

NA Sampling network and rationale
NA Sampling schedule, locations, frequency, duration
____ Sample matrices, target analyte
NA Sampling/Decontamination Procedures
____ Sample containers, preservation, holding times
____ Sample shipment/transportation, Coordination with the laboratory
NA Sample custody and documentation of field activities

3. Analytical Methods

____ Quality of written procedure or choice of reference.
____ Method detection limit, precision, accuracy, comparability
____ Laboratory Documentation

4. Field and Laboratory QC samples

NA Field QC elements
____ Laboratory QC elements
____ Frequency of QC checks
____ Control limits and corrective actions

5. Data Review, Validation and Reporting

____ Review Process
____ Acceptance/rejection criteria for validation
X Data Deliverables

CONCLUSION

____ Approval Recommended
X Approval Recommended With Comments
____ Resubmission Recommended

QA Reviewer: REW

Completion Date: 1-4-91

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TO: Jeff Wandtke,
Regional QAM, Region VII EPA

THRU: Dr. Harold Brown
ESAT Deputy Project Officer, EPA

FROM: Robert E. Nichols
ESAT QA/QC Chemist

THRU: Ronald A. Ross
ESAT Team Manager

DATE: January 10, 1991

SUBJECT: Review of a Quality Assurance document submitted by Savannah Laboratories & Environmental Services, Inc. in support of the **Monsanto J.F. Queeny Plant RCRA Facility Investigation. Addendum.**

TID # 07-9009-519
EPA Activity # QQC11
QA Doc. # 91077

METI # 4634-0519
ICF # 302-26-519-04

ESAT Doc Control # ESAT - VII - 519 - 0013

This is an addendum to a previously submitted review report. This addendum was prepared in an attempt to answer additional questions specifically posed by the RQAMs office.

1. The analytical methods specified for Dioxin and Herbicide analysis are acceptable. It should be noted that the Herbicide method (#8150) is a GC method which references back to the general GC method (#8000) for general GC procedures and QA. This is not noted in the document but is implied by referencing an 8100 method.

Received
1/11/91 DB

2. The deliverables package which the document proposes is generally acceptable but certain specific details should be clarified before the project.begins.

   a. For those QA criteria which will be reported as "Pass/Fail," it should be clearly and specifically defined what will be considered "Passing."

   b. A deliverable for Purgeable Halocarbons, specifically Vinyl Chloride, is proposed. However, Vinyl Chloride is a part of the VOA run, and no DQOs have been specified for the Purgeable Halocarbons method (#8010).

   c. No surrogate recovery data is proposed to be reported for OrganoPhosphorus Pesticides or Herbicides in soil. However, DQOs have been specified for these and as a part of good laboratory practice, they should be analyzed and reported.

   d. Deliverables for PCDD/PCDF in water have been proposed, but no DQOs have been specified for such analyses.

   e. It is unclear whether the analyses for metals in water are to be for Total, Dissolved, or Recoverable Metals.

   f. For those metals analyzed by Furnace AA, ~~it is unclear~~ clarify when, or if the Method of Standard Additions is used.

Total

Ask Doug

We want Total Recoverable Metals, using the "mild digestion" as specified in "Methods For Chemical Analysis of Water & Wastes, EPA 600 4-79-020 (Revised Ed. 1983), in paragraph 4.1.4 of the section on metals.